## **Consolidated Afloat Networks and Enterprise Services (CANES)**

#### N00039-14-D-0125

#### **DO 0002**

CVN Delivery Order (DO) (Hardware Only)

## STATEMENT OF WORK

**REV** (1)

#### **03 December 2015**

Department of the Navy (DoN)
Program Executive Office (PEO)
For Command, Control, Communications, Computers and Intelligence (C4I)

Program Management, Warfare Tactical Networks (PMW 160)

4301 Pacific Highway San Diego, CA 92110-3127

# CANES CVN Delivery Order - Statement of Work

# Distribution Statement A: Approved for public release; distribution is unlimited.

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#### 1 SCOPE

## 1.1 Scope

This CANES Delivery Order (DO) is for the sourcing, assembly, and delivery of one (1) CANES CVN hardware only production unit in accordance with the CANES CVN Production Baseline (PBL). The CANES PBL is comprised of the following artifact:

 CVN Technical Data Package (TDP). The CVN TDP includes all associated drawings and work instructions. The TDP also include the CVN PBL Deviations when and where applicable.

For data deliverables required by this DO Statement of Work (SOW) that are also required by previously awarded and/or currently active DOs under the CANES Multiple Award Contract (MAC), the contractor shall combine the data required by this DO into the applicable data deliverable required by the previously awarded and/or currently active DOs. Unless explicitly noted in this SOW, this consolidated data delivery requirement applies to each submission of all data deliverables required under the following sections of this DO SOW: 3.1.3 (Integrated Product Team (IPT) and Technical Interchange Meeting (TIM) Support); 3.1.4 (Status Reporting); 3.1.5 (Small Business Utilization); 3.1.6 (Quality Assurance); 3.1.7 (Product Validation and Supply Chain Risk Management); 3.1.8 (Environmental, Safety and Occupational Health); and 3.1.10 (Diminishing Manufacturing Sources and Material Shortages). Data within the deliverable should be segregated by DO. If the period of performance and/or requirement for data deliverable under previously awarded DOs expires prior to the period of performance of this DO, the contractor shall continue to submit the data deliverables as required by this SOW for the period of performance of this DO.

#### 1.2 Inspection and Acceptance

Initial inspection shall occur at origin. Final inspection and acceptance shall occur at Destination.

Acceptance shall occur after the successful passing of a Government-conducted Government Acceptance Test (GAT) to verify that the system produced by the contractor is sourced, assembled, and delivered in accordance with the PBL. Acceptance shall be contingent upon successful conduct and issue resolution of acceptance activities, no later than 120 calendar days after delivery.

## 1.3 SOW Organization

The SOW is organized in accordance with Table 1.

**TABLE 1 - SOW ORGANIZATION** 

| Section 1 | Scope                              |
|-----------|------------------------------------|
| Section 2 | Applicable Documents               |
| Section 3 | Requirements (OPN)                 |
| 3.1       | General Support Requirements (OPN) |

| 3.2       | CANES Production (OPN) |
|-----------|------------------------|
| Section 4 | CANES Security Level   |

#### 2 APPLICABLE DOCUMENTS

Documents referenced herein are listed in Table 2. The Contractor shall comply with the following documents as applicable and as directed by the SOW. In the event of a conflict between the text of this document and the applicable documents cited herein, the text of this document takes precedence. Military Standards (MIL-STD) can be located on the Defense Logistics Agency (DLA) Assist website at <a href="http://quicksearch.dla.mil/">http://quicksearch.dla.mil/</a>. PMW 160, CANES, and PEO references will be provided as Government Furnished Information (GFI).

**TABLE 2 - APPLICABLE DOCUMENTS** 

| ID | Reference ID   | Reference Name   | SOW<br>Reference  |
|----|--|--|---|
| 1  | CANES CVN PBL  | CANES Production Baseline and associated deviation artifact (s).   | 1.1, 1.2,<br>3.1.10, 3.2.1.1,<br>3.2.2, 3.2.5,<br>3.2.8, 3.2.10 |
| 2  | DoD IMS GUIDE  | DoD Integrated Master Plan and Integrated Master<br>Schedule Preparation and Use Guide Version 9 (October<br>21, 2005) | 3.1.1   |
| 3  | ISO 9001-2008  | International Standards Organization (ISO) 9001:2000   | 3.1.6, 3.1.8  |
| 4  | PMW 160 DMSMS Plan   | Diminishing Manufacturing Sources and Material<br>Shortages (DMSMS) Plan, Revision 1, June 2012                        | 3.1.10  |
| 5  | DoN Information<br>Assurance Manual<br>(2005)  | SECNAV M-5239.1 Department of Navy Information<br>Assurance Manual (2005)  | 3.1.11  |
| 6  | PMW 160 IUID Plan  | PEO C4I PMW 160 IUID Implementation Plan, Revision 1, August 2012  | 3.2.8   |
| 7  | USD (AT&L) Memo of<br>30 July 2004, Subject:<br>Radio Frequency<br>Identification (RFID)<br>Policy | https://acc.dau.mil/CommunityBrowser.aspx?id=32575   | 3.2.8   |
| 8  | MIL-STD-130N(1)  | Identification Marking of U.S. Military Property, 16<br>November 2012  | 3.2.8   |
| 9  | ASTM-D-3951-10<br>Standard Practice for<br>Commercial Packaging                                    | ASTM, International www.astm.org/Standards/D3951.htm   | 3.2.9   |
| 10 | MIL-STD-129P   | Military Marking for Shipment and Storage MIL-STD-129P Revision P Change 4, 19 September 2007                          | 3.2.9   |
| 11 | MIL-STD-2073   | Standard Practice for Military Packaging MIL-STD-2073 Revision E Change 1, 7 January 2011                              | 3.2.9   |

| ID | Reference ID | Reference Name   | SOW<br>Reference |
|----|--------------|--|------------------|
| 12 | PMW 160 LKIF | PMW 160 License Key Information Form Ver 1.0 dtd<br>April 15 | 3.2.1.1          |

## 3 REQUIREMENTS (OPN)

## 3.1 General Support Requirements (OPN)

## 3.1.1 **Delivery Order Post Award Meeting (PAM)**

The contractor shall host a DO PAM with the Government Program Manager (PM) or the PM's designated representative and his principal CANES team. The contractor shall schedule the PAM with the CANES Procuring Contract Officer (PCO) within fifteen (15) calendar days after delivery order. At the PAM, the contractor shall demonstrate plans and processes for the additional production work.

The contractor shall produce and brief their Production Plan, to address executing the CVN DO in addition to any ongoing DO(s). The contractor shall deliver an Integrated Master Schedule (IMS) in accordance with the DoD Integrated Master Plan and Integrated Master Schedule Preparation and Use Guide Version 9 of 21 October 2005. All contractor schedule information delivered and presented to the Government during performance of this DO shall originate from the IMS. The contractor shall document and perform action item follow-up and resolution activities. The contractor shall provide audio teleconferencing capability for the PAM as requested by the Government. The contractor shall provide teleconference numbers.

The contractor shall provide the following deliverables:

- A001 Presentation Materials, to include the agenda
- A002 Report, Record of Meeting / Minutes, to include Action Items
- A005 Integrated Master Schedule
- A007 Production Plan

## 3.1.2 **Program Management**

The contractor shall designate a Program Manager (PM) to execute program management in accordance with the Contract-Level SOW requirements in Section 3.1.2. The contractor PM shall have responsibility for all aspects of this DO. The PM shall have the authority to commit the contractor to specific actions within the scope of this DO. The contractor shall use the PCO and Contracting Officer Representative (COR) as the primary point of contact for all program activities.

## 3.1.3 Integrated Product Team (IPT) and Technical Interchange Meeting (TIM) Support

The contractor shall host a monthly TIM with the Government and other production stakeholders to discuss and resolve production and engineering issues arising from all active orders under the CANES MAC. The Government reserves the right to require an additional TIM per month to discuss concerns and challenges. TIMs shall begin 2 weeks after the PAM. Each TIM will

address all aspects of production, quality, obsolescence, contractor capacity, life cycle support, risks and problems related to production and associated mitigation schemes for all active DOs. The contractor shall provide audio teleconferencing capability for the TIM as requested by the Government. The contractor shall provide teleconference numbers. Government reserves the right to visit the Contractor's Production Facility at any time during the performance of this delivery order.

The contractor shall provide the following deliverables for each TIM:

- A001 Presentation Materials, to include the agenda
- A002 Report, Record of Meeting / Minutes, to include Action Items

## 3.1.4 Status Reporting

The contractor shall deliver a weekly Progress, Status and Management Report. The report shall provide data and facilitate Government access to contractor production information in support of Government activities regarding risk management and configuration management relating to production unit, sparing, and system component deliveries. The contractor shall submit all questions related to performance of this DO in the weekly report. The contractor shall explicitly break out the following technical and management items:

- Status of major supply sourcing, assembly, hardware testing, quality assurance, and issue resolution activities
- Risk assessment
- Schedules and status of production milestones
- Quality metrics and process improvement activities
- Action item status
- DO Questions

The contractor shall provide the following deliverables:

• A006 Contractor's Progress, Status, and Management Report

The contractor shall systematically collect and report actual costs associated with this DO in accordance with the Contractor Cost Data Reporting (CCDR) requirements of contained in DoD 5000.04-M-1.

The contractor shall provide the following deliverables:

- A029 Cost Data Summary Report DI-FNCL-81565C\*\*
- A030 Functional Cost-Hour Data Report DI-FNCL-81566C\*\*
- A031 Contract Business Data Report DI-FNCL-81765B
- A032 Contract WBS Dictionary and Index DI-FNCL-81334D\*\*

\*\* The data deliverable scope requirements set out in section 1.1 of this SOW are not applicable to CDRLs A029, A030 and A032. CDRLs A029, A030 and A032 are submissions containing data applicable to the single unit delivered under this DO SOW, in accordance with CDRL instructions.

#### 3.1.5 Small Business Utilization

The contractor shall track Small and Small Disadvantaged Business subcontracting activities. The contractor shall deliver a Competitive Subcontracts Report. The contractor shall report on:

- Performance status
- Subcontracting progress, status, and management

The contractor shall provide the following deliverable:

• A008 Competitive Subcontracts Report

#### 3.1.6 Quality Assurance

The contractor shall\_maintain a QA Plan and Program that meet the certification requirements of ISO 9001-2008, or an equivalent QA system, in accordance with the Contract-level SOW Section 3.1.8.

## 3.1.7 Product Validation and Supply Chain Risk Management (SCRM)

The contractor shall maintain a SCRM Plan that details the company processes and procedures for implementing and sustaining an SCRM program for the CANES contract and DOs. The contractor shall include requirements flowed down to vendors, suppliers, and subcontractors.

## 3.1.8 Environmental, Safety, and Occupational Health

The contractor shall document and deliver Material Safety Data Sheets (MSDS) for each identified hazardous material. MSDS shall be completed using Occupational Safety and Health Administration (OSHA) Form 174 and in compliance with 29 CFR 1910.1200. In the event the contractor identifies any real or potential problem, the contractor shall notify the PCO and COR in writing of the specific concerns and recommended course of action within fifteen (15) days of discovering the problem. The contractor shall include all potential or real impacts resulting from the identified problem in the MSDS. An MSDS shall accompany each Hazardous Material Usage List (HMUL) item shipped. The contractor shall forward an electronic copy of the MSDS to marnavyhmirs@med.navy.mil and Naval Supply System Command (NAVSUP) at wraps.prime.fct@navy.mil.

The contractor shall provide the following deliverable:

• A011 Material Safety Data Sheets

#### 3.1.9 **Hazardous Material Management**

The contractor shall perform Hazardous Material Management in accordance with the Contract-Level SOW requirements in Section 3.1.11.

## 3.1.10 Diminishing Manufacturing Sources and Material Shortages

The contractor shall maintain a Diminishing Manufacturing Sources and Material Shortages (DMSMS) Program that complies with the PMW 160 DMSMS Plan. The contractor shall submit their evaluation of all CANES Lowest Replaceable Units (LRUs) IAW CDRL A012, to include a projected End-of-Life (EOL), End-of-Sale (EOS), and end of support date for each LRU. If the contractor learns parts, components, and subsystems included in the CANES PBL may no longer

be produced, the contractor shall use the Enterprise Change Request (ECR) process (as defined by Section 3.2.10 of this DO SOW) to immediately notify the Government in accordance with the PMW 160 DMSMS.

The contractor shall provide the following deliverable:

• A012 DMSMS Quarterly Report

#### 3.1.11 **Security Management**

See 3.1.13 of the Contract-Level SOW.

#### 3.2 CANES Production (OPN)

## 3.2.1 **Production Manufacturing**

#### 3.2.1.1 Production Units and Sub-Assemblies

The contractor shall source, assemble, and deliver one (1) CANES CVN production unit in accordance with the CANES CVN PBL and Sections B and F of the DO.

This is a hardware-only delivery. There is no software loading requirement for this CANES CVN unit.

The contractor shall procure in accordance with the CANES TDP. The contractor shall provide the following:

For entitlements or licenses that are procured with the hardware, such as Cisco products, the contractor shall provide all End-User License Agreements (EULA), original license keys, any associated product activation keys (PAKs), the expiration date of any license that is either procured with support maintenance or support maintenance provided by the vendor, and the original proof of license entitlement, to the Government at unit delivery.

For hardware that requires license keys to be requested or downloaded from vendor portal, the contractor shall provide all information to obtain license keys to the Government IAW CDRL A027.

The contractor shall provide the following deliverable:

• A027 License Keys at Unit Delivery

The contractor shall deliver the following CDRLs with delivery of the production unit:

- CDRL A015 As-Built Configuration List, DO SOW Section 3.2.4
- CDRL A016 Product Validation Report, DO SOW Section 3.2.5
- CDRL A017 Certification of Component Authenticity, DO SOW Section 3.2.5
- CDRL A019 IUID Marked Parts Equipment Report, DO SOW Section 3.2.8
- CDRL A020 Packaging, Handling, Storage, and Transportability Requirements, DO SOW Section 3.2.9.
- CDRL A022 QA Checklist Report, DO SOW Section 3.2.3
- CDRL A024 Warranty Item Report, DO SOW Section 3.2.6
- CDRL A027 License Keys at Unit Delivery, DO SOW Section 3.2.1.1

#### 3.2.1.2 Spares and System Components

Not Applicable.

3.2.1.3 **Spares** 

Not Applicable.

## 3.2.2 Factory Acceptance Test

The contractor shall develop and deliver a Factory Acceptance Test (FAT) Plan and Procedures for the CANES CVN production unit. The Government will not provide the Installation Requirements Drawings (IRD). The FAT shall include electrical, mechanical and visual tests necessary in order to verify that each rack of the production unit, to include subassemblies, power-up, and is sourced, assembled, and delivered in accordance with the CANES PBL.

The contractor shall provide the following deliverable:

• A026 Factory Acceptance Test Plan and Procedures

The contractor shall perform a FAT on the CANES CVN production unit. The contractor shall perform FAT, testing each rack and subassemblies, in accordance with the Government approved Factory Acceptance Test Plan and Procedures CDRL A026.

The contractor shall document and deliver a Factory Acceptance Test Report in accordance with CDRL A014. As part of initial inspection, the contractor shall allow access to the contractor's facility and production units by Government appointed representatives, such as DCMA, so that operational status can be ascertained.

The contractor shall provide the following deliverable:

• A014 Factory Acceptance Test Report

#### 3.2.3 Quality Assurance

The contractor shall perform Quality Assurance activities during sourcing, assembly, and delivery in accordance with the contractor's QA Plan. In accordance with the contractor's QA plan (See Section 3.1.6 of this DO SOW), the contractor shall deliver a completed QA Checklist Report for the CVN production unit.

The contractor shall be responsible for the performance of inspections deemed necessary to show conformance to the specification requirements. The contractor shall assure that the CANES CVN production unit delivered to the Government for acceptance complies with DO requirements.

The contractor shall not submit known defective material regardless of the use of quality conformance sampling as an accepted QA process. Evidence that the best commercial practices are followed during production processes, applicable to the quality of the production unit and its component parts, including statistical process control data, shall be made available at the contractor's plant for review and use by representatives of the procuring activity. The contractor shall promptly act to correct defective material and processes to preclude the recurrence of the problem and to satisfy DO requirements.

The contractor shall provide the following deliverables:

• A022 QA Checklist Report

## 3.2.4 **As-Built Configuration List**

The contractor shall compile and deliver an As-Built Configuration List (ABCL) for the CANES CVN production unit. The contractor shall include information for each Configuration Item (CI) to the Lowest Replaceable Unit (LRU) level as depicted in the As-Built template sample data of the CDRL. The ABCL shall be submitted in native format.

The contractor shall provide the following deliverable:

• A015 As-Built Configuration List

### 3.2.5 Product Validation and Supply Chain Risk Management (SCRM)

The contractor shall deliver a Product Validation Report for the CANES CVN production unit. The contractor shall document, deliver, and maintain origin and chain-of-custody information for products in the CANES PBL. The contractor shall provide information required to assess SCRM issues for any logic-bearing hardware, and firmware components. The contractor shall provide identification and contact information, Commercial and Government Entity (CAGE) codes, and method of delivery to the prime or subcontractor for each product.

The contractor shall provide the following deliverable:

• A016 Product Validation Report

The contractor shall deliver a Certification of Component Authenticity for the CANES CVN production unit. The contractor shall obtain all manufacturer products submitted in DO offers from authentic manufacturers or through legal distribution channels only, in accordance with all applicable laws and policies at the time of purchase. The contractor shall certify that its suppliers are the Original Equipment Manufacturer (OEM) or OEM-authorized, to include Value Added Resellers (VAR), as of the date of the submission of the DO offer. The contractor shall warrant that the products were received new and in their original box.

The contractor shall provide the following deliverable:

• A017 Certification of Component Authenticity

The contractor shall submit a Post Notification Alert to notify the Government of post-delivery supply chain and product compromises for a period not to exceed five (5) years after Government acceptance of the CANES CVN production unit.

The contractor shall provide the following deliverable:

• A018 Post Notification Alert

## 3.2.6 Warranty

The contractor shall provide flow-through OEM warranties from originating vendors. The contractor shall pass to the Government any component software (such as drivers), license agreements, or manufacturer warranties applicable to CANES end items. The contractor shall maintain and deliver a Warranty Item Report.

The contractor shall provide the following deliverable:

• A024 Warranty Item Report

## 3.2.7 Reliability Documentation

The contractor shall maintain a Failure Reporting, Analysis, and Corrective Action System (FRACAS) to track and report on failure history and the associated corrective actions. The contractor shall submit FRACAS reports quarterly.

The contractor shall provide the following deliverable:

• A023 FRACAS Item Report

#### 3.2.8 Item Unique Identification (IUID) and Radio Frequency Identification (RFID)

IUID shall be implemented in accordance with the PMW 160 IUID Implementation Plan. The Contractor shall provide DoD unique item identification (UID) in accordance with DFARS clause 252.211-7003. The contractor shall comply with MIL-STD-130N(1) for IUID of the CANES CVN production unit. The contract shall apply RFID in accordance with USD (AT&L) Memo of 30 July 2004, Subject: Radio Frequency Identification (RFID) Policy for packages containing items shipped to Government facilities. The contractor shall label all CIs in accordance with the CANES PBL. The contractor shall generate and deliver a list of all IUID marked parts and RFID marked packages for the CANES CVN production unit. The contractor shall provide the following deliverable:

• A019 IUID Marked Parts Equipment Report

#### 3.2.9 Packaging, Handling, Storage, and Transportability

The contractor shall deliver the CANES CVN production unit with required shipping containers and in accordance with ASTM-D-3951 Standard Practice for Commercial Packaging. The contractor shall maintain a Department of Transportation (DoT) approved battery shipping container configuration. The contractor shall mark and ship the CVN production unit in accordance with MIL-STD-129P and MIL-STD-2073 DoD Standard Practice for Military Packaging.

Additionally, the contractor shall package the CVN production unit in accordance with the following requirements:

- 1. Pallets shall be constructed IAW the TDP.
- 2. Any system rack shall be bolted to the pallet utilizing bolts with a hexagonal head and a flat washer.
- 3. Packaging shall be designed to restrict the movement of the equipment rack when mounted on isolators during transport.
- 4. The pallet shall be accessible IAW the TDP.
- 5. The equipment rack or system shall be shipped with the upper rear isolators removed from all racks. Rear Isolators and associated hardware shall be returned to the Government at unit delivery.
- 6. The equipment rack or system shall be bubble wrapped or surrounded by five layers of packaging foam.
- 7. The equipment rack and/or system serial number or other part number shall be marked on the outside surface of packaging

8. Any COTS equipment being shipped separately shall reuse OEM shipping material and containers.

The contractor shall identify any specific PHS&T requirements not included in the aforementioned references for the CVN production unit to ensure safe re-transport of the end item by the Government.

The contractor shall provide the following deliverable:

• A020 Packaging, Handling, Storage, and Transportability Requirements

### 3.2.10 Enterprise Change Requests (ECR)

The contractor shall notify the Program Office through the Contracting Officer and Contracting Officer's Representative that the contractor knows or has been advised of projected EOL / EOS timelines for products in the CANES PBL. The notification shall be in an email format stating the EOL or EOS component name, part number, and impact on production. The contractor shall include the notification as part of the subsequent scheduled TIM CDRL A001 presentation materials in accordance with SOW Section 3.1.3. The Government will evaluate the notification for further action. The Government will retain configuration management and decision authority over the PBL.

#### 4 CANES SECURITY LEVEL

The nature of this task requires access up to SECRET. The work performed by the contractor will include access up to SECRET data, information and spaces. The contractor will be required to attend meetings classified up to the SECRET level.

If foreign travel is required, all outgoing Country/Theater clearance message requests shall be submitted to the SSC Pacific Foreign Travel Team, OTC2, Room 1656, for action. A Request for Foreign Travel form shall be submitted for each traveler, in advance of the travel to initiate the release of a clearance message at least 30 days in advance of departure. Each traveler must also submit a Personal Protection Plan and have a Level 1 Antiterrorism/Force Protection briefing within one year of departure and a country specific briefing within 90 days of departure. The contractor shall receive Government authorization in advance of any foreign travel in accordance with clause H-22 "Reimbursement of Travel Costs" (SPAWAR H-350) (JAN 2006).

All work shall be performed in accordance with DoD and Navy Operations Security (OPSEC) requirements and in accordance with the OPSEC attachment to the DD254.